

KOLYASINSKIY, Zigmund Stanislavovich; KONONOVICH, Anatoliy
Vladimirovich; SARKHOSH'YAN, Gurgun Nikitovich;
GRINBERG, P.I., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Mechanization and automation in motor-vehicle repair
shops] Mekhanizatsiia i avtomatizatsiia avtoremontnogo
proizvodstva. Moskva, Avtotransizdat, 1963. 165 p.
(MIRA 17:1)

(Motor vehicles--Maintenance and repair)
(Automation)

YEVZOVICH, Viktor Yvseyevich; GRINBERG, P.I., red.; GORIACHEKINA,
A.A., tekhn. red.

[Retreading motor-vehicle tires] Vosstanovlenie protektorov
avtomobil'nykh shin. Moskva, Avtotransizdat, 1963. 84 p.
(MIRA 16:12)

(Tires, Rubber--Retreading and recapping)

RUBETS, Dmitriy Alekseyevich, kand. tekhn. nauk; SHUKHOV, Oleg
Kronidovich, kand. tekhn. nauk; GRINEBG, P.I., red.;
GALAKTIONOVA, Ye.N., tekhn. ~~red.~~

[Fuel systems of motor-vehicle carburetor engines; their
design, maintenance, and adjustment] Sistemy pitaniia
avtomobil'nykh karbiuratornykh dvigatelei; ustroistvo,
tekhnicheskoe obsluzhivanie i regulirovka. Pod obshchei
red. D.A. Rubetsa. Moskva, Avtotransizdat, 1963. 332 p.
(MIRA 16:9)

(Motor vehicles--Fuel systems)

LUSHNIKOV, Oleg Aleksandrovich; GRINBERG, P.I., red.; RODANOVA,
A.P., tekhn. red.

[Organizing the operation of motor vehicle maintenance
stations] Organizatsiia raboty stantsii tekhnicheskogo ob-
sluzhivaniia avtomobilei. Moskva, Avtotransizdat, 1963. 79 p.
(MIRA 16:5)

(Motor vehicles--Maintenance and repair)

GARASEV, Sergey Mikhaylovich; GRINBERG, P.I., red.; BODANOVA, A.P.,
tekhn. red.

[Maintenance and repair of storage batteries]Ekspluatatsia
i remont akkumulatornykh batarei; posobie akkumulatorshchikov.
Izd.2. perer. Moskva, Avtotransizdat, 1963. 70 p.

(MIRA 16:4)

(Storage batteries--Maintenance and repair)

GURMAN, Viktor Samuilovich; GRINEBERG, P.I., red.; GORYACHKINA,
R.A., tekhn. red.

[Adjustment of UAZ motor vehicles] Regulirovka avtomobi-
lei UAZ. Moskva, Avtotransizdat, 1963. 54 p.

(MIRA 16:4)

(Motor vehicles--Maintenance and repair)

RAMIREZ, A.P.; ROSENBERG, P.I., rev.

Operation and maintenance of the GAZ-51 and GAZ-52
bottle-gas driven motor vehicles; Eksploatatsiia i
tekhnicheskoe obsluzhivanie gazovyykh avtomobilei
GAZ-51 i GAZ-52h. Moskva, Avtoizdat, 1963. 64 p.
(MIRA 17110)

KOSTIN, Konstantin Aleksandrovich. ~~Prinimali~~ ~~uchastiye~~: BOKHAN, I.T.,
inzh.; TSIKUN, D.S., tekhnik. GRINBERG, P.I., red.; BODANOVA, A.P.,
tekhn. red.

[Maintenance of M-21 "Volga" automobiles in automotive trans-
portation units] Tekushchii remont avtomobilei M-21 "Volga" v
avtokhoziaistvakh. Moskva, Avtotransizdat, 1963. 47 p.
(MIRA 16:6)

(Automobiles--Maintenance and repair)

KOROBCHENKO, Igor' Aleksandrovich; GRINEERG, P.I., red.; BODANOVA,
A.P., tekhn. red.

[Equipping motor vehicles and trailers with turn signals]
Oborudovanie ukazateliami povorota avtomobilei i pritse-
pov. Moskva, Avtotransizdat, 1963. 46 p. (MIRA 16:5)
(Motor vehicles--Electric equipment)

ZAKH, Yakov Khononovich, doktor tekhn. nauk; GRIBETS, I.I.,
red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Geometrical parameters of automotive transportation
structures in the case of the use of tractor trains;
investigations and recommendations] geometricheskie pa-
rametry sooruzhenii avtomobil'nogo transporta pri is-
pol'zovanii avtopoezdov; issledovaniia i rekomendatsii.
Moskva, Avtotransizdat, 1963. 43 p. (MIRA 16:12)
(Road construction)
(Tractor trains--dynamics)

ZUBAREV, Aleksey Afanas'yevich; VINOKUROV, V.M., inzh., retsenzent;
GRINBERG, P.I., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Adjustment of the ZIL-130 motortruck] regulirovka avtomobilov
ZIL-130. Moskva, Avtotransizdat, 1962. 87 p. (MIRA 15:9)
(Motortrucks)

MEDVEDKOV, Vladimir Ivanovich; GRINBERG, P.I., red.; GALAKTIONOVA,
Ye.N., tekhn. red.

[Adjustment of GAZ motortrucks]Regulirovka gruzovykh avtomo-
bilei GAZ. Izd.2., perer. Moskva, Avtotransizdat, 1962. 69 p.
(MIRA 15:7)
(Motortrucks--Maintenance and repair)

GRINBERG, P. D., inzh.

Dry ice producer with four membranes. Khol.tekh. 39
no. 6:55 N-D '62. (MIRA 15:12)
(Ice--Manufacture)

GRINBERG, P., inzh.

Intensification of ice-forming processes during dry ice manufacture.
Khol.tekh. 33 no.4:70-71 O-D '56. (MIRA 12:1)
(Dry ice)

GRINBERG, P., inzhener.

Method of filtering a monoethanolamine solution. Khol.tekh.31 no.1:67
Ja-Mr '54. (MLRA 7:4)

1. Odesskiy uglekislodnyy zavod.
(Monoethanolamine) (Filters and filtration)

GRINBERG, N.M.

Effect of preliminary overheating on austenite transformation in the core and the cemented layer of 20Kh2N4A steel. Metalloved. i term. obr. met. no.3:17-21 Mr '64. (MIRA 17:4)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya.

BALTER, M.A., kand.tekhn.nauk; GRINBERG, N.M., inzh.

Causes of crack formation during the cooling of parts following
cementation. Metalloved. i term. obr. met. no.6:27-33 Je '62.
(MIRA 15:7)

(Case hardening)

BALTER, M.A., kand. tekhn. nauk; GRINBERG, N.M.,

Effect of flakiness on the properties of carbon steel [with
summary in English]. Stal' 21 no. 5:271-274 Mr '61. (MIRA 14:6)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya.
(Steel--Metallography)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900048-6

GRINBERG, N.Kh.; MANUYLOVA, T.A.

Rapid method of determining alcohol in fruit juices.
Trudy MGIIIP 5:86-91 '64. (MIRA 19:1)

MIGAL', P.K.; GRINBERG, N.Kh.

Complex formation of cadmium, lead, and zinc ions with formamide in water - methyl alcohol and water - ethyl alcohol solutions. Zhur.neorg.khim. 7 no.6:1309-1312 Je '62. (MIRA 15:b)

1. Kishinevskiy gosudarstvennyy universitet, kafedra fizicheskoy khimii.

(Complex compounds) (Formamide)

MIGAL', P.K.; GRINBERG, N.Kh.

Resolution of cadmium and lead ions in acetone-aqueous and
acetone-alcoholic solutions. Zhur.neorg.khim. 7 no.3:531-535
Mr '62. (MIRA 15:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Metal ions) (Solvation)

MIGAL', P.K.; GRINBERG, N.Kh.

Study of the resolution of certain metal ions in nonaqueous
systems by the polarographic method. Zhur.neorg.khim. 7
no.3:527-530 Mr '62. (MIRA 15:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Metal ions) (Solvation)

MIGAL', P.K.; GRINBERG, N.Kh.

Use of the polarographic method in the study of the hydration of
certain ions in methanol solutions. Zhur. neorg. khim. 6
no.3:727-731 Mr '61. (MIRA 14:3)

1. Kishinevskiy gosudarstvennyy universitet.
(Hydration)
(Ions)

SOV/78-4-8-23/43

The Polarographic Investigation of the Composition and the Stability of the Cadmium Thiosulphate Complexes in Aqueous Solution

formed. In the case of high ionic strength the complex $[\text{Cd}(\text{S}_2\text{O}_3)_3]^{4-}$ is observed. The stoichiometric instability constant was computed according to various methods (Refs 6,7) and showed good agreement. The instability constant of $\text{Cd}(\text{S}_2\text{O}_3)$ increases with increasing ionic strength. The constants for $[\text{Cd}(\text{S}_2\text{O}_3)]^{2-}$ and $[\text{Cd}(\text{S}_2\text{O}_3)_3]^{4-}$ pass a maximum at $\mu = 1$. The thermodynamical instability constant (Table 3) is in agreement with the values found according to the solubility method (Ref 3). There are 2 figures, 3 tables, and 10 references, 5 of which are Soviet.

ASSOCIATION: Kishinevskiy gosudarstvennyy universitet (Kishinev State University)

SUBMITTED: April 30, 1958

Card 2/2

5(2) SOV/76-4-8-23/43

AUTHORS: Migal', P. K., Grinberg, N. Kh., Tur'yan, Ya. I.

TITLE: The Polarographic Investigation of the Composition and the Stability of the Cadmium Thiosulphate Complexes in Aqueous Solution (Polyarograficheskoye issledovaniye sostava i ustoychivosti tiosul'fatnykh kompleksov kadmiya v vodnom rastvore)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1844-1848 (USSR)

ABSTRACT: The solutions $\text{Cd}(\text{NO}_3)_2 + \text{NaClO}_4 + \text{Na}_2\text{S}_2\text{O}_3$ are investigated at different ionic concentrations which were kept constant in the individual experiments. In order to suppress the maximum 0.01% gelatin was added to the polarographically investigated solutions. Oxygen was removed by the passage of hydrogen. A calomel standard electrode served as comparison cathode. The polarographic measuring results are shown by table 1. The dependence of the potential of the semiwave on the logarithm of the concentration of the thiosulphate ion is shown by figure 1. A step-wise complex formation was observed which the other research workers (Refs 2,4) had neglected. With low ionic strength only the complexes $[\text{Cd}(\text{S}_2\text{O}_3)]$ and $[\text{Cd}(\text{S}_2\text{O}_3)_2]^{2-}$ are

Card 1/2

L 37659-66

ACC NR: AT6012355

0

functional units, uses unmatched transistors, and is stable with a supply-voltage variation of $\pm 20\%$ and ambient temperature variation of -25°C ; the system functions normally at 90% relative humidity. These units constitute the system: step-synchronized transmitter-receivers for 1000 control and signaling commands (clock frequency, 3 kc; interrogation cycle, 0.35 sec); logic units for interlocking various mechanisms via tele-channels; a program-control unit; transducer units for various purposes. "In 1965, an improved modification of BTA-PU-S was developed."

Abstracter's note: [No testing of the system is mentioned.] Orig. art. has: 1 table.

SUB CODE: 13, 09 / SUBM DATE: 08Jan66 / ORIG REF: 001

me
Card 2/2

L 37659-66 EWP(k)/EWI(d)/EWP(h)/EWP(l)/EWP(v) RC/GD

ACC NR: AT6012355

SOURCE CODE: UR/0000/66/000/000/0202/0208

AUTHOR: Prangishvili, I. V.; Zak, L. A.; Levin, A. A.; Grinberg, N. B.

ORG: none

TITLE: Unitized contactless tele-automatic BTA-PU-S system for mining industries

SOURCE: Nauchno-tehnicheskaya konferentsiya po sredstvam promyshlennoy telemekhaniki. Moscow, 1963. Promyshlennaya telemekhanika (Industrial telemechanics); materialy konferentsii. Moscow, Izd-vo Energiya, 1966, 202-208

TOPIC TAGS: automatic control, automatic control system, automatic control theory, industrial automation / BTA-PU-S automatic control system

ABSTRACT: Developed by IAT and "Red Metallist" plant, the BTA-PU-S automatic control system is intended for automating production flowlines and transportation lines in the coal and mining industries. The system is connected (via contactless transducers and amplifiers) with level sensors, machine and mechanism controls (flight and belt conveyers, rolls, etc.), position limit switches, contactors, etc. The system tolerates parameter spread of its elements, permits interchanging its

Card 1/2

LIPIS, B.V.; DUGAYEVA, L.I.; GRINBERG, N.Kh.

Polarographic method for determining colloids in grape and apple juice. Kons. i ov. prom. 18 no.8:38-41 Ag '63. (MIRA 16:8)

1. Moldavskiy nauchno-issledovatel'skiy institut pishchevoy promyshlennosti.

(Fruit juices) (Colloids) (Polarography)

GRINBERG, E.M.; ZAK, L.N.; LAYMAN, S.A.; and HENNINGSEN, J.V.

The 1974-75 non-nuclear information system for over-all automation.
Prirodopisnye nauki, 1974, 17:6.

(NII, 17:6)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900048-6

GRINBERG, N.A., kand. tekhn. nauk; PETROV, I.V., inzh.; KOSHELEV, I.K.

Wear resistance of building-up materials at variable temperatures.
Vest. mashinost. 45 no.6:33-37 Jo '66. (MIRA 18:6)

KURKUMELI, E.G., inzh.; GRINBERG, H.A., kadm. tekhn. nauk;
LAVONITS, L.S., doktor tekhn. nauk

Effect of austenite in hard-faced metal on wear-resistance
and impact resistance. Svar. proizv. no. 6:1-3. Ju '68.
(MIA 1417)

1. Vsesoyuznyy mashino-inzhenernyi'kiy institut po stroitel'stву
registratsionnykh truboprovodov.

L 61709-65

ACCESSION NR: AP5016103

abrazivnom dinamicheskom iznashivani. "Vestnik mashinostroyeniya," 1963, No. 8). After determining the test conditions for best simulation, the materials were tested at temperatures above 0°C, and the materials showing best durability were then tested at -250. Metallographic analysis of the platings before and after the tests were also conducted. Six groups of metal platings were tested: 1- alloys with high C, Cr, and V content (KBKh, KBKh-45, KHR-19, T-620, ETN-5); 2- tungsten alloys (relit, ETN-4, ETN-4 on, ETN-2); 3- medium-alloy plating (EN-60M); 4- alloys of the type "stalinit" (improved stalinit, ETN-2, TsN-11); 5- high-manganese alloys (ETN-1); 6- C, Cr, W alloys (OZI-1, VSN-6). It was found that KBKh-45, ETN-2, TsN-11, OZI-1, and VSN-6 had the best coefficients of relative volume wear resistance (relative to steel G13L): 1.55, 1.13, 1.64, 1.97, and 2.81 respectively for plating on steel St 3 (above 0°C); 1.47, 1.02, 1.46, 1.75, 2.66 on St3 (at -250) and 1.68, 1.16, no data, 2.11 3.08 on G13L (at -250). These results were checked by plating half of actual excavator teeth with some of the better alloys and using them under operating conditions. The results were 3.68 and 3.23 respectively for VSN-6 and OZI-1, indicating that these are the most durable plating materials. Orig. art. has: 4 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 002

hard alloy

ENCL: 00

OTHER: 000

SUB CODE: MM, IE

Card 2/2

L 61709-65 EWT(d)/EWT(m)/EWP(w)/EWP(i)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(z)/
EWP(b)/EWP(l) P1-4 MJW/JD

ACCESSION NR: AP5016103

UR/0122/65/000/006/0033/0037
621.81:620.178.16

AUTHORS: Grinberg, N. A. (Candidate of technical sciences); Petrov, I. V. (Engi-
neer); Koshelov, I. K.

TITLE: Wear-resistance of plating materials at different temperatures

SOURCE: Vestnik mashinostroyeniya, no. 6, 1965, 33-37

TOPIC TAGS: metal wear, wear resistance/ KBKh alloy, KBKh 45 alloy, KHR 19 alloy,
T 620 alloy, ETN 5 alloy, ETN 4 alloy, US alloy, ETN 2 alloy, EN 60M alloy, TsN 11
alloy, ETN 1 alloy, OZI 1 alloy, VSN 6 alloy, Q13L alloy

ABSTRACT: To determine the most durable plating alloy for teeth on EKG-4 exca-
vator shovels, 15 different plating alloys were experimentally tested at the
Moskovskiy inzhenerno-stroitel'nyy institut im. V. V. Kuybyshev (Moscow Engineer-
ing Construction Institute) under simulated working conditions. The specimens
were tested in apparatus OhP-1M, which represents a rotating drum with internally
mounted specimens (filled with granulated abrasives) simulating actual working
conditions of the open pit excavators as reported by K. D. Ohudakov, I. V. Petrov,
and L. S. Valova (Issledovaniye rabotosposobnosti naplavochnykh materialov pri

Card 1/2

L 53880-65

ACCESSION NR: AP5014893

2

base weld metal alloyed with carbon, chromium, nickel, and boron was investigated. In addition to its wear tests in an abrasive-wear machine and impact tests in an impact testing machine, the deposited metal was subjected to a complete metallographic analysis and the structure of the carbides was investigated by the phase X-ray analysis method. Microstructural examinations confirmed that the content of austenite increases with the amount of nickel. Deposited metals of this system, in the presence of a fixed 22% carbide phase, display the following optimal properties depending on their application: 1. Austenite content up to 12% -- expedient for welding machine parts that operate under conditions of active abrasive wear in the absence of impact loadings; 2. Austenite content 12-49% -- best for the weldments operating under conditions of simultaneous abrasive wear and impact loadings; 3. Austenite content > 50% -- suitable for machine parts that operate in the presence of considerable impact loadings and insignificant abrasive wear.

ASSOCIATION: VNIIST

SUBMITTED: 000

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 000

Card #2/2

L 52880-65 EWT(d)/EWP(e)/EWT(m)/EWP(w)/EWP(l)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/
 EWP(z)/EWP(b)/EWP(l)/EWA(e) Pf-l/Pad IJP(e) JD/HM/HW
 UR/0135/65/000/006/0001/0003 41
 621.791.92 39
 E

AUTHOR: Kurkumelli, E. G. (Engineer); Grinberg, N. A. (Cand. of technical sciences); Livshits, L. S. (Dr. of technical sciences)

TITLE: Effect of austenite in built-up metal on wear resistance and impact strength 16

SOURCE: Svarochnoye proizvodstvo, no. 6, 1965, 1-3

TOPIC TAGS: wear resistance, abrasive wear, impact strength, deposited metal, weldment, carbide phase, austenite content

ABSTRACT: A major problem of the theory of wear is the effect of the structural state and chemical composition of an alloy on its wear resistance. In this connection, the authors investigated the effect of the amount of austenite on the wear resistance and impact strength of deposited metals of the Fe-C-Cr-Ni-B system with different amounts of austenite and a fixed amount and properties of the carbide phase. The metal was deposited by means of arc welding (reversed-polarity direct current of 150-170 amperes, arc voltage 25 volts) in a two-pass build-up sequence with specially developed thickly coated electrodes. Iron- 2722

Cord 1/2

01.10.1987, 14.00; 1.10.1987, 14.00; 1.10.1987, 14.00

Effect of the variable phase in the α -phase of the α -phase of metal. Actual over. P is 10^{-10} to 10^{-11} .

1. Vozrastnyy mekhanizm razvitiya i funktsionirovaniya
nervnoy sistemy raznoy raznosti.

LIVCHITS, I.S., doktor tekhn. nauk, GRINBERG, M.S., kandidat tekhn. nauk

Structure and properties of the friction zone of wear-resistant
hard facing. Svar. prize, no.9.7.4. 1964. (MKR 27412)

1. Vsesoyuzny nauchno issledovatel'skoy institut po stroitel'stvu
magistral'nykh tr ibopriyemov.

S/129/63/000/003/003/009
E111/E351

Influence of

carbide at the expense of the cementite-type carbide.
There are 3 tables.

ASSOCIATION: VNIIST

Card 2/2

S/129/63/000/003/003/009
E111/E351

AUTHORS: Livshits, L.S., Grinberg, N.A. and Kurkumelli, E.G.
TITLE: Influence of carbon and alloying elements on carbide-
formation in the tempering of steel
PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
no. 3, 1963, 12 - 15
TEXT: Steels containing about 0.8 - 5.5% Cr or 0.6 - 2.6% V
and about 0.1, 0.4 or 0.8% C were melted, cast, heat-treated,
cooled to -75°C after quenching and tempered at 550 or 700°C for
10 h. The carbide composition was determined by X-ray diffraction,
the carbide separation being effected by electrolytic dissolution.
The nature and stability of the carbides formed on tempering were
found to depend on the ratio of alloying elements to carbon.
Characteristic ratios were found for each element, which governed
the stability range of cementite-type and special carbides for any
given temperature and heating time. The ratio, nature and
stability of the carbides are affected by the general level of
the alloying-element content; for a given value of the ratio an
increase in the level broadens the stability range of the special
Card 1/2

GRINBERG, N.A.; LIVSHITS, L.S.

Hard facing of parts working in conditions of abrasive wear and shock loading. Avtom. svar. 15 no.7:18-24 J1 '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.
(Hard facing) (Machinery--Testing)

LIVSHITS, Lev Semenovich, kand. tekhn. nauk. Prinimali uchastiye:
BAKHRAKH, L.P., starshiy nauchnyy sotr.; PANICH, S.I., inzh.;
GRINBERG, N.A., asp.; KURKUMELLI, E.G., inzh.; KAVKOVA, V., red.

[Role of alloyed steel composition on the conservation of structural homogeneity, and the properties of welded joints during heat time] Rol' sostava legirovannykh staley v sokhranении strukturnoi odnorodnosti i svoistv svarnykh soedinenii pri dli-
tel'nykh rabochikh nagrevakh. Moskva, VNIIST Glavgaza SSSR. Re-
daktionno-izd. otдел, 1962. 56 p. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'-
stvu magistral'nykh truboprovodov (for Bakhrakh, Panich,
Grinberg, Kurkumell.).
(Steel---Welding) (Metals, Effect of temperature on)

LIVSHITS, L.S., kand.tekhn.nauk (Moskva); GRINBERG, N.A., inzh. (Moskva)
MUKHIN, V.N., inzh. (Moskva); KALYALIN, V.S., inzh. (Moskva)

Increasing the durability of the teeth of rotary excavators. Stroi.
truboprov. 6 no.5:5-7 My '61. (part 14:7)
(Excavating machinery)

S/135/60/000/011/005/016
A006/A001

Factors Affecting Removability of Slag Crust From Weld

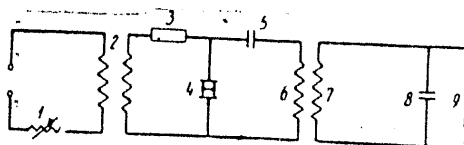


Figure 1. High-frequency generator circuit: 1 - rheostat; 2 - 220/6000 v transformer; 3 - ceramic resistor, 200 kohm; 4 - spark discharger; 5 - 0.01 microfarad capacitor; 6 - induction coil; 7 - connecting coil; 8 - 110 picofarad capacitor; 9 - analytical gap. ✓

There are 4 figures, 3 tables and 3 references: 2 Soviet and 1 English.

ASSOCIATION: VNIIST (All-Union Scientific Research Institute for the Construction of Main Pipelines)

S/135/60/000/011/005/010
A006/A001

Factors Affecting Removability of Slag Crust From Weld

Welding iron-ye. O. Paton (Figure 1). The basic conditions of taking the spectra using an UCN-28 (ISP-28) spectrograph were: slit width - 0.026 mm; analytical gap - 0.9 mm; operational gap - 0.7 mm; exposure - 30 sec; 1.0-1.2 mm diameter upper copper electrode; analytical pairs of lines: manganese - 2,576 Å; iron - 2,591.5 Å; manganese 2,939 Å; iron 2,936 Å. The coefficient of expansion was determined by conventional methods applied to glass and enamels. Its value was 3.46×10^{-5} in case of good removability of slag and 4.8×10^{-5} in the opposite case. The experiments showed that cohesion of the slag crust and the metal surface was produced by the oxide film arising on the slag-metal interface, and depended on the chemical composition of the film. Removability of slag was the more difficult the higher was the content of metal oxides in the film, which produces with slag complex compounds of the $FeAl_2O_4$ type. A higher manganese content in the oxide film impaired removability of slag. Granulation of ferroalloys and rutyl included into the coating did not considerably affect removability of the slag, which is made difficult by the higher acidity of slag in basic-type electrodes.

S/135/60/000/011/005/016
A006/A001

AUTHORS: Grinberg, N.A., and Rogova, Ye.M., Engineers

TITLE: Factors Affecting Removability of Slag Crust From Weld

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 11, pp. 18-20

TEXT: It was previously established that in automatic welding an oxide film, formed on the weld surface, was one of the causes affecting the removability of the slag. Another factor was found to be the coefficient of thermal expansion of the slag and the effect of manganese distribution in the slag - oxide film-metal system. The changes of the thermal coefficient of expansion and the effect of manganese distribution were studied on MST-3 steel plates built-up with BCP-50 (VSR-50) electrodes, manufactured at various plants. Building up was carried out with d-c of reverse polarity, 140 - 160 amp current and 25 - 28 v arc voltage. The distribution of manganese in the oxide film and in the weld was examined by spectral analysis using a high-frequency spark. The thickness of the layer affected was not over 2 - 5 microns. High-frequency conditions without rectifying the current from a generator were used, based on a circuit recommended by the Institut elektrosvarki im. Ye.O. Patona AN USSR (Institute of Electric

Card 1/3

00174

S/125/60/000/05/02/

The Nature of Chemical Non-Homogeneity of the Fusion Zone in Some Pearlite Steels

concentration in the parent metal at the weld. The maximum carbon concentration in the fusion zone is the higher the more carbon is formed in the carbides by the alloying element in the metal. The speed of the carbon penetration increase depends directly on the stability of the carbides forming. 3) The "PMT-3" apparatus with pointed electrode instead of a diamond is well suited for analysis. There are 2 photographs, 2 diagrams, and 11 references 10 of which are Soviet and 1 English.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov (All Union Scientific Research Institute for Construction of Pipe Mains)

SUBMITTED: November 9, 1959

Card 3/3

X

S/125/60/000/05/02/015

The Nature of Chemical Non-Homogeneity of the Fusion Zone in Some
Pearlite Steels

rinsed in alcohol. A high frequency "DG-2" generator was used (Ref. 10) for exciting the spectrum, fitted with a variable shunting liquid capacitor. For simultaneous determination of carbon and other elements (chromium, niobium, etc.) plate types "III" and "I" of different sensitivity were inserted. The relative carbon determination error was 3.7%. The weld specimens of steel with 0.12% C, were welded with electrodes producing different contents of elements, and heated for 100 hours in 700°C. The microstructure of a specimen is shown in Figure 1. It was proved that it is possible to change the nature of the carbonized zone in welded joints prone to carbon migration in increased temperature, by adding elements producing carbides of different stability, and by changing the fusion depth. The following was concluded: 1) Carbon migrates between the parent and the weld metal toward the side with a higher content of carbide forming elements (or with elements forming more stable carbides) and the nature of the carbonized zone depends on details of the welding process and the type of the carbides forming. 2) Increasing the depth of the fusion in the parent metal must lead to a smoother change of carbon

X

Card 2/3

017.

S/125/60/000/05/32, 33

18.7200

AUTHORS: Livshits, L. S., Grinberg, N. A., Panich, S. I., Shamonov, S. I.TITLE: The Nature of Chemical Non-Homogeneity of the Fusion Zone in Some Pearlite Steels

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 5, pp. 11-16

TEXT: Local spectral analysis with "three standards" was employed in investigating the distribution of carbon and other elements in the fusion zone of welded joints. The article gives the most characteristic results of investigation of welds with 1.9% Cr, and with 1.7% V. A "PMT-3" apparatus (Fig. 2) was slightly changed for local analysis with the use of a manganese needle electrode, i. e. the diamond was replaced by this electrode. The other electrode was a lead cone. The cylindrical needle 1 mm in diameter was of pure magnesium produced by electrolysis with 10-12 volt, a-c in electrolyte consisting of 90 cm³ of 10% Na₂HPO₄ solution and 10 cm³ H₂SO₄. Sharpening the needle to 0.01-0.015 mm took 20⁴ to 25 sec. After every photograph with the "ISP-28" spectrograph, the needle was immersed for 2-3 sec into 10% HNO₃ solution to remove oxides, then was

Card 1/1

4

25(1)

SOV/125-59-1-11-15

The Use of Local Spectrum Analysis for Research of the Chemical
Heterogeneity of the Fusion Section by Application of Electro-Contact
Welding

Technical Sciences. Taking part in the experiments were
engineer Ye. A. Volodina, and the technician S. I. Shamonov.
There are two photos, five tables, three graphs, and five
references, four of which are Soviet, and one English.

ASSOCIATION: VNIIST Glavgaza SSSR

SUBMITTED: June 27, 1958

Card 3/3

25(1)

CGV/125-59-1-11-15

The Use of Local Spectrum Analysis for Research of the Chemical Heterogeneity of the Fusion Section by Application of Electro-Contact Welding

of manganese will remain essentially unchanged. When fusing with low-carbon steel, the manganese content in the welding section is almost as constant as in the basic metal, while the quantity of carbon in the same section abruptly decreases upon formation of ferrite streaks. As a result of the upsetting pressure, and the coating of annealed surfaces with smelted metal and iron vapor, the welded fusions of chromium-manganese steel have heterogeneous chemical compositions in the butt and in the basic metal, as regards carbon, chromium and manganese. The pressure applied during the upsetting, presses out the liquid metal. The composition of this metal differs from that in the basic metal. Subsequently, the hard surfaces of the rod, that possess the same chemical composition as the basic metal, are fused. The tests were performed under the direction of V.D. Taran, Doctor of

Card 2/3

25(1)

SOV/125-59-1-11-15

AUTHOR:

Bobritskiy, N.B., Grinberg, N.A.

TITLE:

The Use of Local Spectrum Analysis for Research of the Chemical Heterogeneity of the Fusion Section by Application of Electro-Contact Welding (Primeneniye lokal'nogo spektral'nogo analiza dlya issledovaniya khimicheskoy neodnorodnosti zony soyedineniya pri elektrokontaktnoy svarke)

PERIODICAL:

Avtomaticeskaya svarka, 1959, Nr 1, p 62-69 (USSR)

ABSTRACT:

The authors report on some results of tests performed on the chemical heterogeneity of welded fusions by means of the spectro-analytical method. Low-alloy chromium-manganese and low-carbon steel rods were welded on by electro-contact fusion. When fusing such rods by electro-contact welding, the content of carbon, chromium and manganese in the butt section does not differ from the concentration of these elements in the basic metal. A considerable chemical heterogeneity in the welded butt section (especially in regard to chromium and carbon) may be attained by coating the weldable surfaces with a layer of rust. The oxidation processes will thus be intensified and the content

Card 1/3

Truing and Cutting of Stainless Steel Electrode Wire

135-10-14/19

of the quantity did not meet the desired range of 70 - 90 kg/mm² ultimate strength. The optimum mechanical properties for minimum rejects (0.5%) in truing-and-cutting guillotine-type machines are 70 - 90 kg/mm² ultimate strength and 26 - 52% relative elongation. Certain wire-drawing and heat treatment conditions are recommended in the article. There are 3 diagrams and 1 chart.

ASSOCIATION: Moscow Electrode Plant (Moskovskiy elektrodnyy zavod)

AVAILABLE: Library of Congress

Card 2/2

GRINBERG, N. A.

135-10-14/19

AUTHORS: Lysenko, A.F., Engineer, and Grinberg, N.A., Engineer

TITLE: Truing and Cutting of Stainless Steel Electrode Wire (Pravka i rubka elektrodnoy provoloki iz nerzhavayushchey stali)

PERIODICAL: Svarochnoye Proizvodstvo, 1957, No 10, pp 37-38 (USSR)

ABSTRACT: The purpose of subject investigation - performed collectively by the Moskva Electrode Plant, TsNIIChERMET and the plant "Serp i Molot" - was to find the optimum mechanical properties of stainless electrode wire. Since the standard "ГОСТ 246-54" does not specify the mechanical properties of wire, considerable variations of these properties in various consignments and within a consignment are the result, and there is a high percentage of wire rejects in truing-and-cutting machines through warpage and raptures. Wire grades "OX18H9", "1X18H9T" and "X20H10F6" were experimentally investigated and the optimum heat treatment conditions and drawing technology were found. The difference of properties of presently produced stainless steel electrode wire is illustrated by the test results of "87" wire consignments at the plant "Serp i Molot". This wire was annealed in flame furnaces at 850 - 900° C; 23%

Card 1/2

GRINBERG, N.

Method for determining the norms for corrections in the wage
fund. Mias. ind. SSSR 34 no.5:37-39 '63. (MIRA 16:11)

1. Kiyevskiy myasokombinat.

GRINBERG, N.

Determining the indexes of the fulfillment of the plan for
production costs in packing house branches. Mias.ind.SSSR 31
no.2:42-43 '60. (MIRA 13:8)

1. Kiyevskiy myasokombinat.
(Meat industry--Costs)

GRINBERG, N.

Use meat strictly according to its designation. Mias. ind.
SSSR 27 no.4:42 '56. (MLRA 9:10)

1. Kiyevskiy myasotrest.
(Meat industry)

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 665 - I

BOOK Call No.: AF 411112

Authors: MISOZHNIKOV, V. M. and GRINBERG, M. Ya.
Full Title: COLD UPSET FORGING OF METALS
Transliterated Title: Tekhnologiya kholodnoy vysadki metallov

PUBLISHING DATA

Originating Agency: None
Publishing House: State Scientific and Technical Publishing House of Machine-Building and Shipbuilding Literature (MASHGIZ)

Date: 1951 No. pp.: 307 No. of copies: 4,000

Editorial Staff
Editor: Zakrzhevskiy, V. B. Appraiser: Navrotsky, G. A., Kand. of
Techn. Sci.

PURPOSE: This book is designed for engineers and technicians in the field of cold working of metals, to be used by them as a handbook on technical data, machinery, equipment, tools and materials used.

TEXT DATA

Coverage: The book provides exhaustive information on cold forging of metals upsetting of nails, rivets, bolts, pushing rods, etc., which require steel of up to 30 m/m in diameter. The authors give brief information on plastic deformation of metals, on determination

GRINBERG, M.M.; KVASKO, N.Z.

Manufacture of writing paper using blanched reed cellulose.
Bum. 1 der. prom. no.3:32-34 J1-S '64.

(MIRA 17:11)

GRINEERG, M.M.; BURTNAYA, N.F.

Use of reed pulp for the manufacture of fine paper varieties.
Bum.prom. 37 no.11:5-6 N '62. (MIRA 15:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut tsellyuloznoy
i bumazhnoy promyshlennosti.
(Paper)
(Reed products)

RUDNEV, V.N., kand. tekhn. nauk; MOCHENOV, L.G., kand. tekhn. nauk; GILNEBRO, M.M.,
inzh.

Type 6UI-303 rectifier for substations. Elek. i tepl. siaga 6
no. 8:5-7 Ag '62. (MIRA 17:3)

MOCHENOV, I.G., inzh.; MITRIYEVSKIY, G.V., inzh.; GRINBERG, M.M., inzh.

Ways of improving the performance of rectifiers with consecutive
valve connection. Elek. i teplotiya 5 no.11:10-12 N '61.
(MIRA 14:11)

(Electric current rectifiers)

(Electric railroads--Substations)

GRINBERG, M.M.

Ontogenesis of the teleost scale. Zool. zhur. 40 no. 2:234-
243 F '61. (MIRA 14:2)

1. Department of Vertebrate Zoology, State University of
Leningrad.

(Scales (Fishes))

GRINBERG, M.M., inzh.

Two-mesh ripple filter devices. Elek i tepl. tiaga 4 no.10:19-20
0 '60. (MIRA 13:10)

(Electric railroads) (Electric filters)

3/114/61/000/002/005/007
E021/E284

Investigation of the Corrosion Resistance of Austenitic Steels in
The Medium of Moscow Coal Flue Gases

also showed that a substructure formed underneath the scale with the formation of a chain of oxides. Results of mechanical tests showed that the strength and hardness practically did not change during testing. The elongation decreased by 10-18%. The impact strength of EI-694, EI-773 and EI-726 decreased by 30-50%, that of EI-695R by 60-75% and that of 1Kh18Ni2T by a factor of 3. The absolute value of the impact strength of all the samples, however, was sufficiently high. There are 2 tables 3 figures and 1 Soviet reference. ✓

Card 3/3

S/114/61/000/002/005/007
E021/E28.

Investigation of the Corrosion Resistance of Austenitic Steels in
the Medium of Moscow Coal Flue Gases

specimens were left for 7998 hours in contact with the furnace gases. The corrosion resistance was determined by the change in weight of the specimens after test. In addition, the change in dimensions of the test specimens was noted. The oxide films were removed by electrolytic treatment in fused 60% Na_2CO_3 : 40% NaOH at 450-500°C and current density of 24-50 A/dm for 2-5 minutes. The thickness and structure of the oxide layer were also determined metallographically. The results of the decrease in thickness (in mm) of the metal per year at 670°C were as follows:
EI - 0.004, 1Kh18N12T - 0.0034, EI-726 - 0.0075, EI-694 - 0.0055 and EI-695R - 0.0275. Similar results were obtained in the loss of weight. Thus EI-695R is quite resistant and the other steels are very resistant. Oxide films formed on all the samples tested were very dense and thin and adhered tightly to the metal. In the majority of cases the film had two layers: an external light grey layer - mainly magnetite and an inner darker and harder layer containing an iron - chromium spinel. Metallographic examination

Card 2/3

S/114/01/000/002/005/007
E021/E284

AUTHORS: Larichev, V. A. (Deceased) and Grinberg, M. L.,
Engineers

TITLE: Investigation of the Corrosion Resistance of
Austenitic Steels in the Medium of Moscow Coal Flue
Gases

PERIODICAL: Energomashinostroyeniye, 1961, No. 2, pp. 29-32

TEXT: The aim of the investigation was to examine the
corrosion resistance and the stability of the mechanical
properties of several austenitic steels 24-6255 (EI-695R) (0.07-
0.12% carbon, 13.0-15.0% chromium, 15.0-20.0% nickel, 0.9-1.3%
niobium, 2.0-2.75% tungsten, 0.003% boron; 24-6255 (1Kh18N12T)
(AISI 321), 24-694 (EI-694) (0.07-0.12% carbon, 13.0-15.0%
chromium, 14.0-17.0% nickel, 0.9-1.3% niobium, 2.0-2.75% tungsten, 0.003% boron; 24-694 (EI-726)
(composition unknown, except for 16% chromium and 13% nickel)
and 24-726 (EI-726) (same as EI-695R except for a higher boron
content - 0.025%) under working conditions in steam tubes from
600-700°C with chemically active fuels. One tube of each material
was cut into six parts which were used in the various tests. The
Card 1/3

Apparatus for Mechanically Polishing
Metallographic Ground Sections

SOV/32-25-2-52/79

Instructions for mounting the device on the polishing frame
are given. There is 1 figure.

ASSOCIATION: Moskovskoye otdeleniye Tsentral'nogo kotloturbinnogo instituta
(Moscow Department of the Central Boiler-Turbine Institute)

Card 2/2

10(7)

AUTHOR:

Grinberg, M. L.

SOV/52-25-2 52/13

TITLE:

Apparatus for Mechanically Polishing Metallographic Ground Sections (Pribor dlya mekhanicheskoy polirovki metallograficheskikh shlifov)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 2, pp 229-230 (USSR)

ABSTRACT:

A simple device (Fig) for mechanizing the polishing of metallographic ground sections has been designed. It can be mounted directly on the horizontal polishing frame. The clamping bar moves freely in the bore of the angle table which permits a precise functioning of the device. The bar may be turned as well as moved forward. This double movement is made possible by a construction by which one movement is effected by shifting the polishing wheel in relation to the sample while the sample is turned around its axis. It is pointed out that in manufacturing the device care has to be taken to keep the axis of the bar exactly vertical to the plane on which the sample rests.

Card 1/2

Card 1/4

SOV/137-58-9-19936
The Influence of Recrystallization Texture (cont.)
tensile testing, the σ_s of drawn and rolled specimens is higher than in
torque testing. Bibliography: 16 references.

F.U.
1. Metals--Mechanical properties
structure--Metallurgical effects 2. Metals--Crystallization 3. Crystal

Card 2/2

L 37658-66

ACC NR: AP6022052

SOURCE CODE: UR/0146/66/009/003/0022/0026

AUTHOR: Aliyev, T. M.; Grinberg, M. G.; Ter-Khachaturov, A. A.ORG: Azerbaydzhan Institute of Petroleum and Chemistry im. M. Azizbekov
(Azerbaydzhanskiy institut nefti i khimii)

TITLE: High-speed a-c pulse-time converter

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 3, 1966, 22-26

TOPIC TAGS: converter, pulse time converter, telemetry system

ABSTRACT: The development of an ac-pulse-to-time converter for telemetry purposes is reported; the instrument is based on the conversion of variable d-c voltage into time intervals by means of a two-cycle integrator (A. K. Zavolokin et al., Avt. i telemekhanika, 1960, no. 6). The principle of operation and the underlying theory are briefly set forth. A laboratory model exhibited these characteristics: with a 1--15-v variation of the input 50-cps voltage, the output pulse time varied from 1.2 to 19 msec; clock frequency, 25 cps; nonlinearity of the output characteristic, 1% or less; temperature error, 0.3% per 10C, within 20--60C. The converter was developed for telemetering two functionally connected variables pertaining to the operation of oil-well depth pumps. "Engineer Ch. M. Melikov took part in the experimental investigation of the converter." Orig. art. has: 3 figures and 11 formulas.

SUB CODE: 09 / SUBM DATE: 31Aug65 / ORIG REF: 005

Card 1/1

UDC:681.142.621

[03]

FIALKOV, A.S.; GUMILEVSKAYA, G.P.; GRINBERG, M.B.

Modification in the binder in the first stage of sintering
of carbon-graphitic materials. Zhur.prikl.khim. 35 no.10:
2308-2313 0 '62. (MIRA 15:12)
(BINDING MATERIALS) (GRAPHITE)

L 22005-66

ACCESSION NR: AP5024511

on the detector. In caprolan the ultrasonic echo signal flaw detection method is more sensitive than the x-ray method. With UDM-1M, 1.8 mm defects can be detected in an article 280 mm thick. "X-ray Data by A. V. Yermolin; NIIPM"
Orig. art. has: no graphics

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: 11, 20

NR REF SOV: 000

OTHER: 000

Card

2/2 BK

L 22005-66 EWT(m)/EMP(j)/T/EMP(k) IJP(c) RM

ACCESSION NR: AP5024511

UR/0191/65/000/010/0055/0056
678.675.019:620.179.16

AUTHOR: Antropova, N. I.; Makeyeva, L. G.; Yenyutina, T. L.; Nikolayev, V. I.; Grinberg, M. A.

TITLE: Flaw detection in caprolan stocks and articles

SOURCE: Plasticheskiye massy, no. 10, 1965, 55-56

TOPIC TAGS: ^{synthetic material,} polyamide, ultrasonic flaw detector, ultrasonic inspection, non-destructive test, quality control/UDM-1 ultrasonic flaw detector

ABSTRACT: Applicability of the ultrasonic method for flaw detection in caprolan pieces was studied. The ultrasonic echo flaw detector UDM-1 may be adapted to the detection of defects in caprolan utilizing the set of sensor heads used for flaw detection in metal articles. A frequency of 1.8 megacycles is required for caprolan thickness to 100 mm and 0.8 megacycles is required for 100-300 mm thicknesses. The sample surface should be smooth, clean and covered with a thin layer of oil or glycerin. The depth of the defect is determined from a scale

Card 2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000616900048-6

SECRET, 10-10-1961

1. The following information was received from the
2. source, who is reliable and has provided reliable information in the past.
3. The source has provided reliable information in the past.
4. The source has provided reliable information in the past.

GRINBERG, M., tekhnik

Use of industrial methods in electric installation work in large-panel housing construction. Bud. mat. i konstr. 4 no.1:57-59 Ja-F '62.

(MIRA 15:7)

(Electric wiring, Interior)

(Precast concrete construction)

GRINBERG, M.

PBK-3 pneumatic wrench. Neftianik 6 no. 12 20 b 1961.

(HURA 14:12)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdeleniya kontser'nyu Archedinskogo neftepererabatyvayushchego upravleniya.
(Wrenches)

GRINBERG, Liliya Yefimovna; ANDREYEVA, E.G., red.; BELYAYEVA, K.I.,
tekhn. red.

[Means of communication; post office, telephone, radio,
television] Sredstva svyazi: pochta, telefon, radio, te-
levidenie. Leningrad, Uchpedgiz, 1962. 103 p.
(MIRA 16:5)

(Communication and traffic)
(English language--Technical English)

L 56541-65

ACCESSION NR: AP5016774

ENCLOSURE: 01

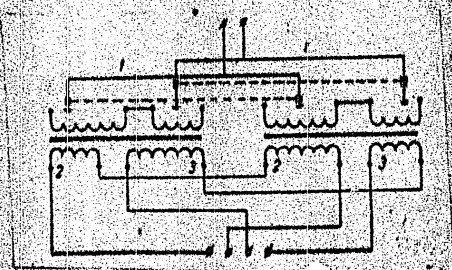


Fig. 1. 1--functional transformer;
2--cumulatively connected secondaries of
the transformers; 3--subtractively con-
nected secondaries

mb
Card 3/3

I 56541-65

ACCESSION NR: AP5016774

ASSOCIATION: none

SUBMITTED: 20Sep48

ENCL: 01

SUB CODE: DP

NO RIF SOV: 000

OTHER: 000

Card 2/3

L 56541-65

ACCESSION NR: AP5016774

UR/0286/65/000/010/0088/0088

681.14

681.2.087

681.142

16
BAUTHOR: Grinberg, L. S.

TITLE: An electric computer. Class 42, No. 171183

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 88

TOPIC TAGS: computer, electric circuit, computer technology

ABSTRACT: This Author's Certificate introduces an electric computer based on Author's Certificate number 160384. The device is designed for simultaneously finding two functions of two independent variables. The result is given in the form of two voltages proportional to two fractions whose numerators are the independent variables while the denominators are the difference in their squares. The functional transformers in the unit have two pairs of identical secondaries. Two of these windings are connected cumulatively, while the other two are connected subtractively.

Card 1/3

L 13113-63

On the operation of vacuum photocells...

S/146/63/006/002/002/010

coefficients characterizing the light source and the sensitivity of the photocell. Analysis of the experimental results using the theory of errors yields equations linking the deviation of the photo current ΔI_ϕ with the percentage deviations of the photocell voltage $\delta_{U_\phi}\%$ and the lamp voltage $\delta_U\%$. The most general of these equations reads:

$$\Delta I_\phi = C_1 \cdot \delta_{U_\phi}\% + C_2 \cdot m \delta_U\%,$$

where $m = 3.61$ for a tungsten filament. This equation is most accurate for $U_\phi = 10-300$ v and for variations in the lamp voltage of $\pm 10\%$. The method can also be applied to non-vacuum photocells. There is 1 figure.

ASSOCIATION: Lesotekhnicheskaya akademiya im. S. M. Kirova (Forestry Engineering Academy imeni S. M. Kirov)

SUBMITTED: March 30, 1962

Card 2/2

L 13113-63EWG(k)/BDS/EWT(1) AFFTC/APGC/ASD/ESD-3 Pz-4 IJP(C)/AT
S/146/63/006/002/002/010AUTHOR: Zhestyanikov, V. M. and Grinberg, L. S.TITLE: On the operation of vacuum photocells at reduced voltage

PERIODICAL: Izv. Vuz., Priborostroyeniye, v. VI, no. 2, 1963, 9-13

TEXT: Although photocells⁰ are important components of many industrial and scientific instruments, little attention has been paid to their operation under abnormal conditions. The authors consider the effect of reduced voltage in the circuit supplying the lamp illuminating the photocell. An empirical equation

$$I_{\phi} = \frac{U_{\phi} \phi}{K_1 + K_2 U_{\phi}},$$

is obtained for the volt-ampere characteristic of an antimony-cesium photocell in the region of reduced voltage. Here I_{ϕ} is the photo current in μ a, U_{ϕ} is the photocell voltage in v, $\phi = \text{const}$ is the light flux in lumens, and K_1, K_2 are

Card 1/2

GRINBERG, Lev Matveyevich; NISHCHENKO, Z. A., sov. red.; NASIROVA,
S. G., red. izd-va, IVONTSEVA, G. A., izkh. red.

[Karakum Canal] Karakumskii kanal. Ashkhabad, Izd-vo AN
Turkm.SSR, 1963. 150 p. (MIRA 15:10)
(Karakum Canal)

GRIMBERG, L. M. Cand Tech Sci -- "Study and generalization of the experience of construction of the Karakumy canal." Mos, 1961 (Min of Agr USSR. All-Union Order of Lenin Acad Agr Sci im V. I. Lenin. All-Union Sci Res Inst of Hydraulic Engineering and Improvement im A. N. Kostyakov). (KL, 4-61, 195)

SOV/99-59-8-2/10

The Karakum Canal

photographs and 1 table.

ASSOCIATION: Vodnoye khozyaystvo Turkmenuskoy SSR (Water Economy [Ministry]
of the Turkmenuskaya SSR)

Card 3/3

SOV/99-59-8-2/16

The Karakum Canal

first working group under Engineer I.V. Boltenev was established. The project prepared by him has been approved in 1947 and the draft plan approved in 1952 (Fig.1). The description of the tracing of the canal follows. The plan for the first phase has been carried out by M.V. Potapov. For the removal of the 8.3 million cubic meters of alluvial soil annually, various measures were taken. Considerable difficulties are caused by the protection of the sand hills which are up to 21 m high (180 to 310 km). A photograph (Fig.9) shows the sand hills on which reed and bushes have been planted. A description of the removal of earth (71 million cubic meters), of the technical equipment and of the necessary machinery follows. Then follows the description of the economic significance of the canal for an area which has a similar climate to that of Egypt or California. Seven sovkhoses for wool, fruit and wine growing will be organized in the basin of the River Murgab. The canal will serve as an important navigable water-way through the desert. At present the lengthening of the canal for additional 535 km is worked on. There are 1 map, 9

Card 2/3

SOV/99-59-8-2/10

32(4)

AUTHOR: Grinberg, L.M., Deputy Minister

TITLE: The Karakum Canal

PERIODICAL: Gidrotekhnika i melioratsiya, 1959 Nr 8, pp 8-17 (USSR)

ABSTRACT: Currently the foundation work for the construction of the largest canal in Turkmenistan, the Karakum Canal, has been completed. Within five years a 400 km long artificial river was cut through the desert of Karakum. The world knows many huge constructions of this type, but this is the first canal through a sand desert. The heat during the month of July here is worse than in the Tropics, and this desert has the lowest rate of rain: 120-150 mm per year. The whole surface to be worked on is four million ha. Only 20% of the water of the Amu-Darya river have been utilized. The tasks of the Karakum-Canal is the distribution of water to all regions. The research work started already in 1906-1907 (under Engineer Yermolayev). In 1911 a new expedition was started, led by Engineer Shlegel'. After the October Revolution, engineers F.P. Morgunenko and Sazonov worked on this project. In 1940 the

Card 1/3

86687

S/136/60/000/012/005/010
E193/E183

Electrolytic Refining of Beryllium

The metal in the anodic slime collector contained (after washing) 0.05-0.02% Fe, 0.05-0.03% Ni, and 0.02-0.03% Cu; no agglomeration of impurities in the electrolyte was observed. It was concluded that beryllium obtained by the process described in the present paper satisfies most stringent requirements and approaches in quality metal refined by distillation.

There are 4 figures, 6 tables and 2 Soviet references.

Card 5/5

X

86687

S/136/60/000/012/005/010
E193/E183

Electrolytic Refining of Beryllium

The voltage and current employed were 5.5 V and 800 amp. The electrolyte (50:50 $\text{BeCl}_2\text{:NaCl}$) was replenished from an adjacent bath with an insoluble anode. The energy consumed in one test amounted to 34 000 amp-h, the maximum output being 3.5 kg of refined beryllium, which corresponded to an average current efficiency of 80%. Recovery of beryllium attained was also 80%. The cathode deposit constituted 94% of the dissolved anode material. A homogeneous deposit, in the form of bright plate-like crystals, measuring 15 x 20 mm, was produced. For the preparation of anodes, beryllium obtained either electrolytically or by thermal reduction of fluoride, was used. In the former case, it contained 0.02-0.05% Fe, 0.1% Ni, and 0.005-0.008% Cu; in the latter case the impurity content was 0.12% Fe, approximately 0.01% Ni, and 0.01% Cu and Mn. In most cases the refined metal contained 0.005-0.006% Fe, 0.01% Ni, and 0.003% Cu; the manganese content did not exceed $n \times 10^{-4}\%$, that of zinc and silicon being less than $n \times 10^{-3}\%$; the deposit contained less than 0.3 g/t boron and less than 0.04 g/t rare earths.

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Electrolytic Refining of Beryllium

the time required for the current efficiency to attain a steady value was the same (about 24 h), irrespective of the purity of BeCl_2 in the electrolyte, but the maximum current efficiency attained was lower when impure BeCl_2 was used. The current efficiency and recovery attained in a 180-hour test were 85 and 83% respectively. Under these conditions, 50% of beryllium was deposited in the form of large, plate-like crystals and 50% in the form of smaller grains, strongly adhering to the cathode. The laboratory experiments were repeated on a somewhat larger scale, after which long-term tests were conducted in a pilot plant. In view of promising results obtained, a series of tests on an industrial scale was carried out. A standard bath for electrolytic extraction of beryllium was used for this purpose. The anode consisted of seven beryllium powder compact rings (each weighing 1 kg), suspended on a graphite rod. Before starting the refining operation, the bath was operated for a short period with a graphite anode, in order to remove from the electrolyte those metallic impurities which are more electro-positive than beryllium.

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E193/E183

Electrolytic Refining of Beryllium

of beryllium and sodium chlorides (melting point equal 220 °C), was employed in subsequent experiments. The results of tests in which the cathode current density was varied between 4 and 16 amp/dm², showed that up to 12 amp/dm² the current efficiency remains practically constant and a compact beryllium deposit, consisting of bright crystals, is produced. When the current density was increased to 16 amp/dm², a small quantity of spongy deposit was formed. The beryllium anodes contained 4 to 5 x 10⁻²% Fe, 1 to 5 x 10⁻²% Al, 2 x 10⁻²% Cu, 1 x 10⁻³% Mn, and 5 x 10⁻²% Ni. Variation of the anode current density between 6 and 50 amp/dm² hardly affected the impurity content of the cathode deposit, which contained 1 to 3 x 10⁻³% Fe, 3 x 10⁻³% Al and Ni, 1.5 x 10⁻³% Cu, and 10⁻³% Mn. Determination of the current efficiency was the object of the next series of experiments, carried out under the optimum conditions, i.e: current 3 to 4 amp; cathode current density 8.8 to 12 amp/dm²; temperature 340 °C; voltage 0.3 to 0.5 V. It was found that

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26. 2240 also 2308

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E193/E183

AUTHORS: Silina, G.F., and Grinberg, L.L.

TITLE: Electrolytic Refining of Beryllium

PERIODICAL: Tsvetnyye metally, 1960, No. 12, pp. 47-53

TEXT: The object of the present investigation was to develop an electrolytic process of refining beryllium that would produce material sufficiently pure to be suitable for nuclear engineering applications. The laboratory experiments were carried out in quartz vessels. Nickel strip cathodes and commercial grade beryllium anodes, made by the powder metallurgy technique (hot or cold pressing), were used. To avoid contamination of the metal by chlorine (in the form of beryllium oxichloride), an electrolyte, consisting of KF-NaF-2BeF_2 and melting at approximately 600°C , was first tried. The current efficiency attained was low; the metal was deposited in a finely-crystalline form and difficulties were experienced in washing off the solidified electrolyte. Since the KCl-NaCl-2BeF_2 mixture proved unsatisfactory for the same reasons, the electrolyte normally used in electrolytic extraction of beryllium, and consisting of approximately equal proportions

Card 1/5

X

I. 08559-67 EWT(1) JK
ACC NR: AP6034519 SOURCE CODE: UR/0016/66/000/010/0033/0035
AUTHOR: Grinberg, L. D. 13
ORG: Leningrad Microbiology and Epidemiology Institute im. Paster
(Leningradskiy institut epidemiologii i mikrobiologii)
TITLE: Serological differentiation of Flexner bacilli using the
hemagglutination method
SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 10,
1966, 33-35
TOPIC TAGS: ~~human afflictment, dysentery~~, diagnostic medicine, hemagglutination method, *microbiology, antigen*
ABSTRACT: The hemagglutination method was used to differentiate 55 strains from 377 cultures of Flexner bacilli. Various types of specific anticiliar antigens were isolated and used in the identifications. This test is suggested as an auxiliary method of identifying Flexner strains. Orig. art. has: 1 table. [W.A. 50]
SUB CODE: 06/ SUBM DATE: 17Jan66
Card 1/1 UDC: 576.851.49(B. disenteriae Flexner).077.34

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Reports Nos. 1-7: Trudy Len. inst. epid. i mikrobiol. 24.
210-273 '63.

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a review of the literature. Ibid.:274-392 (MIRA 1964)

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Vavilovskaya) Instituta epidemiologii i mikrobiologii im. Harkova.

NOVGOPOLSKAYA, E.M.; GRINBERG, L.D.

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(SHIGELLA PARADYSENTERIAE)

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nogo aptechnogo upravleniya GAPU Ministerstva zdravookhraneniya
USSR

(DRUGS,
new drugs in medicinal prep.)